

claims in view of the remarks herein are respectfully requested.

Drawings

Applicants have submitted a formal drawing for Figure 1 with this Response to Office Action, which corrects the Examiner's objections. The margins were changed to meet the requirements of 37 CFR §1.84. No new matter was introduced.

35 USC §102(e) Rejection

The Examiner rejected Claims 1-22 as being anticipated by Green, et al. (US 6,303,303 B1). Applicants respectfully traverse this rejection. Applicants would like to point out that US 6,303,303 B1 is a divisional of US 5,853,979, which was cited by the Examiner in the previous Office Action. The disclosures of the two patents are identical.

The Examiner asserts that Green, et al. disclose methods of assigning base numbers to peaks within experimental DNA sequencing data traces wherein a corrected time scale for a reference sequence is identified and applied to the experimental data trace. The Examiner further asserts that the methods of correcting the time scale uses second order, or higher, polynomial functions to create normalization coefficients. The Examiner further states that each of the limitations of the rejected claims is set forth in Green, et al., including apparati for carrying out the methods.

Applicants submit that the Examiner's assessment is an over-generalization and does not consider the specific language of the pending claims. Applicants' invention contains limitations in the claims, which call for the sampling of experimental data traces at specific time locations determined from the reference sequence. A reference sequence is co-electrophoresed with the experimental sequence, and the resulting reference data trace is used to determine where to sample for specific peaks in the experimental sequence. At no time is there a comparison of the experimental data trace and the reference data trace, nor any effort to make them appear similar.

By contrast, in the Green patent, the goal is for the standard data trace and the experimental trace to be made similar. A polynomial function is determined to define the stretching and shifting which is needed to make the experimental trace look like the standard

trace. In the Green patent, there is no analysis of the standard data trace to find the times at which peaks should occur, and then use of this time scale to sample for peaks. Indeed, in the Green patent, the standard sequence need not be co-electrophoresed with the experimental sequence.

Since Green, et al. do not disclose the presently claimed invention, Applicants respectfully request withdrawal of this rejection and allowance of Claims 1-22.

Double Patenting Rejection

The Examiner rejected Claims 21 and 22 as being unpatentable over claims 1-14 of Green, et al. (US 6,303,303 B1). The Examiner stated that the claims are not patentably distinct from each other because they appear to describe the same apparatus, having the same functions, for the same purposes. Applicants respectfully traverse this rejection. Again, the same argument as presented above applies here. Applicants' invention contains limitations in claims 21 and 22, which call for the sampling of experimental data traces at specific time locations determined from the reference sequence. The Examiner has not indicated how this limitation is met in claims 1-14 of the Green patent. Since Green, et al. do not disclose all of the limitations of the presently claimed apparatus, Applicants respectfully request withdrawal of this rejection and allowance of Claims 21 and 22 without the requirement of a terminal disclaimer.

For the foregoing reasons, Applicants respectfully urge that all of the claims and drawings as now presented be allowed.

Respectfully submitted,

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